

THE UNIVERD SHAYES OF AMERICA

TO ALL TO WHOM THESE PRESERTS SHALL COME: Holden's Joundation Seeds I. J. C.

There has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE CHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR TING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'LH299'

In Jestimonn Thereof, I have hereunto set my hand and caused the seal of the Hunt Haristy Frotection Office to be affixed at the City of Washington, D.C. this twenty-ninth day of April, in the year two thousand and eight.

Attost:

De-zu

Commissioner Plant Variety Protection Office Agricultural Marketing Service dwarp T: Schafe.

Secret Sculture

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filling fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initiated and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> **Piant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

- 18a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date,
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Sold in U.S. - December 2004

(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (02-10-2003) designed by the Plant Variety Protection Office with Word 2000. Replaces former versions of ST-470, which are obsolete.

EXHIBIT A

Origin and Breeding History LH299

LH299 was developed from the cross of LH277 \times (LH168 \times LH176) by selfing and using the conventional ear-to-row system of plant breeding. Yield, stalk quality, root quality, disease tolerance, late plant greenness, late plant intactness, ear retention, pollen shedding ability, silking ability and corn borer tolerance were the criteria used to determine the rows from which ears were selected during the development of LH299.

LH166, LH176 and LH277 the progenitors of LH299, are proprietary field corn inbred lines of Holden's Foundation Seeds, L.L.C., of Williamsburg, Iowa.

Summer 1998	The inbred line LH277 (a proprietary Holden's inbred) was crossed to the cross of inbred line LH168 x LH176 (proprietary Holden's inbreds) in Iowa Field/Row 39076-39079.
Winter 1998-99	The S0 seed was grown ear-to-row and self-pollinated in nursery row 24228 in Hawaii.
Summer 1999	S1 ears were grown ear-to-row and self-pollinated in nursery range/row 7312 in Hawaii.
Summer 2000	S2 ears were grown ear-to-row and self-pollinated in nursery row 9568 at lowa.
Winter 2000-2001	S3 ears were grown ear-to-row in Hawaii in nursery row 2016.
Summer 2001	S4 ears were grown ear-to-row in nursery row 7692 at lowa.
Winter 2001-2002	S5 ears were grown ear-to-row and self-pollinated in nursery row 32487 at Hawaii.
Summer 2002	S6 ears were grown ear-to-row and self-pollinated in nursery row 48120 at lowa.
Summer 2003	S7 ears were grown ear-to-row and self-pollinated in nursery row 26379 at lowa.
Summer 2004	S8 ears were grown ear-to-row and self-pollinated in nursery row 75813-75822 at Iowa.
Winter 2004-2005	S9 ears were grown ear-to-row and self-pollinated and final selection made in Hawaii nursery row/field #05KA3A7. Line coded LH299.

Statement of Stability and Uniformity

LH3299 has shown uniformity and stability for all traits described in Exhibit C. It has been self-pollinated and ear-rowed for six generations, with careful attention to uniformity of plant type to ensure homozygosity and phenotypic stability.

Statement of Variants

The line is stable, uniform and no variant traits have been observed or are anticipated in LH299.

EXHIBIT B

Statement of Distinctness

Holden's Foundation Seeds L.L.C. believes that Corn Variety LH299 is most similar to Corn Variety LH277, an inbred developed by Holden's Foundation Seeds L.L.C.

Corn Variety LH299 differ from Corn Variety LH277 at the following traits:

Trait	LH299	LH277
Anther Color	Salmon (10 R 7/8)	Purple (5 RP 5/6)
Glume Color	Light Red (5 R 5/8)	Medium Green (5 GY 4/8)
Silk Color	Yellow (2.5 Y 8/10)	Light Green (5 GY 5/10)

2005

Variety	Cob Diameter (mm)
LH299	23.7
	(Std Dev = 1.6, N= 5)
LH277	32.4
	(Std Dev = 0.7, N= 5)
P_Val	0.00
Signif.	**

2006

CobDiameter (mm)
23.9
(Std Dev = 1.2, N=5)
32.8
Std Dev = 0.2, N=5)
0.00
**

Significance levels are indicated as: + = 10%, * = 5 %, ** = 1%

Corn Variety LH299 has salmon anther color, a light red glume color, yellow silk and smaller diameter cob while comparative corn variety LH 277 has a purple anther color, medium green glume, light green silk and a larger cob diameter.

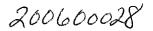


EXHIBIT B (cont'd)

<u>Description of Experimental Design</u>

The corn varieties LH299, LH277 and CM105 were grown at the Waterman, IL observation nursery in years 2005-2006. The varieties were planted in 2 row plots with 15 plants per row in each of the three years. Trait data were collected on 10 random representative plants for most traits from each 2 row plot. Data on qualitative traits are usually collected on 10 plants from each 2 row plot. For Exhibit C all data were pooled and reported as means across the years for subject variety and the standard variety with standard deviation. The varieties are randomly planted in a 4.5 acre observation nursery which is located within a larger 18 acre field. Besides the observation nursery, this field consists of a research seed increase nursery and an IP seed inventory nursery. The location of each of these individual nurseries is rotated each year to a different location within the 18 acre field. Therefore subject inbreds are not planted adjacent to comparative or standard varieties and may be located in different areas of the larger field each year, therefore being influenced by spacial differences within the field. Growing conditions within the field are not uniform as there are some slight topographical variations such as lower areas which may accumulate and retain water or higher areas which are usually drier. The field is tiled and therefore a variety maybe planted close to a tile line while a comparative variety maybe planted further away and in a low spot within the field. Temporal varieties can exist as weather conditions from year to year can vary as well as planting dates can vary from year to year based on weather conditions. Weather conditions each year can vary the maturity rate of the varieties due to either favorable or unfavorable growing conditions.

Trait variability is not observed for each variety within its own test plot-plants are usually uniform and data are collected on the "most" representative plants- variability occurs due to spacial location of the test plot for that variety from year to year and to the temporal variation of weather conditions from year to year during the 2-3 years data are collected.

Waterman Research Station Weather Data 2005-2006

Date	Average Precip. (mm)	Ave. Monthly Temp – Max.	Ave. Monthly Temp-Min	Ave. Monthly Rel. Humid Max (%)	Ave. Monthly Rel. Humid – Min (%)
June 2005	0.9	84.7	61.3	89.8	41.7
July 2005	2.0	84.9	61.7	93.4	44.7
August 2005	2.5	82.6	60.4	94.9	50.0
Sept 2005	1.8	79.9	55.0	94.3	44.3
June 2006	2.7	78.4	56.7	89.8	45.9
July 2006	2.3	84.2	64.6	93.5	55.4
August 2006	2.1	87.2	67.5	94.7	57.1
Sept 2006	1.6	80.0	61.6	90.1	50.8

5

United States Department of Agriculture, Agricultural Marketing Service Science and Technology, Plant Variety Protection Office National Agricultural Library Building, Room 400 Beltsville, MD 20705-2351

OBJECTIVE DESCRIPTION OF VARIETY CORN (Zea mays L.)

	CORN (Zea m	ays L.)				
Name of Applicant(s)	Variety Seed Source		e Variety	Variety Name or Temporary Designation		
folden's Foundation Seed L.L.C.				LH299		
Address (Street & No., or R.F.D. No., City, State, Zip Code and	d Country)		FOR O	FFICIAL USE PV	PO Number	
8350 Minnegan Road, Waterman, IL 60556			ó	20060002	28	
Place the appropriate number that describes the varietal chara necessary. Completeness should be striven for to establish an	cters typical of this inbred variety adequate variety description.	in the spaces below. R	Right justify whole nu	ımbers by adding leading	g zeroes if	
COLOR CHOICES (Use in conjunction with Munsell color code	to describe all color choices; des	scribe #25 and #26 in C	omments section):			
01=Light Green 06=Pale Yellow	11=Pink	16≃Pale	e Purpie	21=Buff		
02=Medium Green 07=Yellow 03=Dark Green 08=Yellow-Orange	12=Light Red	12=Light Red 17=Purple 13=Cherry Red 18=Colorless		22=Tan 23=Brown		
04=Very Dark Green 09=Salmon	14=Red	19=Whi		24=Bronze		
05=Green-Yellow 10=Pink-Orange	15=Red & White		ite Capped	25=Variegated (Des 26=Other (Descri		
STANDARD INBRED CHOICES (Use the most similar (in bac Yellow Dent Families: Family Members B14 CM105, A632, B64, B68	Yellow Dent (Unrelated Co109, ND246,	make comparisons ba	Sweet	iai data): Corn: :13, lowa5125, P39, 213	2	
B14 CM105, A632, B64, B68 B37 B37, B76, H84	Oh7, T232 W117, W153R		Полого	 .		
B73 N192, A679, B73, NC268	W117, W153R W182BN		Popcor S	n: 6G1533, 4722, HP301, H	P7211	
C103 Mo17, Va102, Va35, A682						
Oh43 A619, MS71, H99, Va26 WF9 W64A, A554, A654, Pa91	White Dent:	00	Pipeco			
TYPE: (describe intermediate types in Comments section)	Cl66, H105, Ky2	20		1015W, Mo16W, Mo24W		
0. 4=Dunet Output 0.=Flint 4. Flint 5. Dunet 0.=Flint 6. Dunet 0.=			i	Standard Inbred Name CM105		
a PEGONAMENT STEEL			2 Type			
2. REGION WHERE DEVELOPED IN THE U.S.A.:			Standard Seed S	Source		
2 1=Northwest 2=North central 3=Northeast 4=So	utheast 5=South central 6=So	outhwest 7=Other	2 Region			
3. MATURITY (In Region Best Adaptability; show Heat Unit for	mula in "Comments" section):			,	-	
DAYS HEAT UNITS 7 3 1 3 4 5 0 From emergence to 50% o	f plants in silk		DAYS 68	HEAT UNITS 1400.5		
7 2 1 2 9 5. 5 From emergence to 50% o	f plants in pollen		64	1292.5		
From 10% to 90% pollen s	From 10% to 90% pollen shed			~		
From 50% silk to optimum	edible quality			_		
From 50% silk to harvest a	t 25% moisture					
4. PLANT:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
1 4 8. 7 cm Plant Height (to tassel tip)	10.1	30	160.5	24.6	30	
4 8.1 cm Ear Height (to base of top ear node)	8.7	30	49.4	12.0	30	
1 1. 7 cm Length of Top Ear Internode	1.1	30	11.7	2.0	30	
Average Number of Tillers	****					
1.0 Average Number of Ears per Stalk	0.2	30	1.0	0.1	15	
2 Anthocyanin of Brace Roots: 1=Absent 2=Fair	nt 3=Moderate 4=Dark		2			
Application Variety Data	Page 1		Standard Inbred	Data		

Application Variety Data	Page 2		Standard Inbre	d Data		
5. LEAF:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
9 . 3 cm Width of Ear Node Leaf	1.6	30	7. 1	0.7	30	
5 8. 1 cm Length of Ear Node Leaf	7.4	30	6 6. 7	9.6	30	
5.8 Number of leaves above top ear	0.5	30	5. 7	0.6	15	
2 4. 5 degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to	6.6 stalk above leaf)	30	4 7.8	7.0	30	
0 2 Leaf Color (Munsell code 5 GY 4/8)			0 2 (Munsell code 5 GY 4/8)			
1 Leaf Sheath Pubescence (Rate on scale from 1=none to 9=like peach fuzz)						
4 Marginal Waves (Rate on scale from 1=none to 9=many)						
5 Longitudinal Creases (Rate on scale from 1=no	ne to 9=many)		5			
B. TASSEL:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
2.2 Number of Primary Lateral Branches	8.0	30	5. 3	1,2	30	
3 0. 7 Branch Angle from Central Spike	18.1	30	3 3.2	9.0	30	
3 0. 9 cm Tassel Length (from top leaf collar to tassel tip)	2,9	30	3 4.4	2.6	30	
5.6 Pollen Shed (Rate on scale from 0=male sterile to 9=heavy shed)						
0 9 Anther Color (Munsell code 10 R 7/8)				0 7 (Munsell code 2.5 Y 8/10)		
1 2 Glume Color (Munsell code 5 R 5/8)			- 1 2 (Muns	ell code 2.5 R 5/8)		
1 Bar Glumes (Glume Bands): 1=Absent 2=Presen	t		1			
a. EAR (Unhusked Data):						
0 7 Silk Color (3 days after emergence) (Munsell code 2.	5 Y 8/10)		0 7 (Muns	ell code 2.5 Y 8/10)		
0 2 Fresh Husk Color (25 days after 50% silking) (Munse	Il code 5 GY 4/8)		0 2 (Muns	ell code 5 GY 4/8)		
2 1 Dry Husk Color (65 days after 50% Silking) (Munsell code 2.5 Y 8/4)			2 1 (Muns	ell code 2.5 Y 8/4)		
1 Position of Ear at Dry Husk Stage: 1=Upright 2=Horizo	ontal 3=Pendent		1			
5 Husk Tightness (Rate on scale from 1=very loose to 9	=very tight)		9			
1 Husk Extension (at harvest): 1=Short (ears exposed) 2 tip) 4=Very Long (>10 cm)	2=Medium (<8 cm) 3=Long (8	-10 cm beyond ear	1		v	
o. EAR (Husked Ear Data):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
1 2. 8 cm Ear Length	0.9	30	1 4.0	1.6	30	
3 9. 6 mm Ear Diameter at mid-point	3.7	30	3 8.0	1.4	15	
77.2 gm Ear Weight	3.5	30	7 3.2	1.9	15	
16.4 Number of Kernel Rows	1.9	30	1 3.9	0.9	15	
2 Kernel Rows: 1=Indistinct 2=Distinct			2			
1 Row Alignment: 1=Straight 2=Slightly Curved 3=S	Spiral		1	-		
9.7 cm Shank Length	3.7	30	6.8	2.0	15	
2 Ear Taper: 1=Slight 2=Average 3=Extreme			2			
2 car raper. I origin 2-Average 3-Extreme			_			

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Application Variety Data	Page 3	····	Standard Inbred	Data	
8. KERNEL (Dried):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
0 9 .7 mm Kernel Length	1.1	30	0 9.2	1.0	15
8 . 1 mm Kernel Width	0.6	30	0 8.2	0.6	15
5 . 2 mm Kernel Thickness	1.2	30	0 5.1	1.2	15
37.4 % Round Kernels (Shape Grade)	1.8	500g	56.8	2.6	500g
1 Aleurone Color Pattern: 1=Homozygous 2=Segregation	ng (describe)		1		
1 9 Aleurone Color (Munsell code Lighter than 2.5 Y 9/2)			1 9 (Muns	ell code Lighter Than 2.5	Y 9/2)
0 8 Hard Endosperm Color (Munsell code 5 Y 7/10)			07 (Munse	ell code 2.5 Y 8/8)	,
3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (sh: 5=Waxy Starch 6=High Protein 7=High Lysine 10=Other	2) 3=Normal Starch 4 8=Super Sweet (se)	4=High Amylose Starch 9=High Oil	0 3	,	
3 2.3 gm Weight per 100 Kernels (unsized sample)	3.1	1400 seeds	2 2.5	2.6	2000 seeds
9. COB:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
2 3 .9 mm Cob Diameter at mid-point	1.4	30	2 6. 2	1.3	15
1 4 Cob Color (Munsell code 5 R 4/10)			1 4 (Muns	ell code 5 R 4/10)	
DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most Race or Strain Options blank if polygenic): A. Leaf Blights, Wilts, and Local Infection Diseases	resistant); leave blank if	not tested; leave		<u> </u>	
Anthracnose Leaf Blight (Colletotrichum graminicola) Common Rust (Puccinia sorghi) Common Smut (Ustilago maydis) Eyespot (Kabatiella zeae) Goss's Witt (Clavibacter michiganense spp. nebraskense) Gray Leaf Spot (Cercospora zeae-maydis) Helminthosporium Leaf Spot (Bipolaris zeicola) Northern Leaf Blight (Exserohilum turcicum) Southern Leaf Blight (Bipolaris maydis) Southern Rust (Puccinia polysora) Stewart's Witt (Erwinia stewartii) Other (Specify) B. Systemic Diseases Corn Lethal Necrosis (MCMV and MDMV) Head Smut (Sphacelotheca reiliana) Maize Chlorotic Dwarf Virus (MCDV)	Race _ Race _ Race _		3 Northern Leaf 6 Southern Leaf Southern Rus 4 Stewart's Wilt Other (Specif	st nut ot rium Leaf Spot	Race 1
Maize Chlorotic Mottle Virus (MCMV)	Strain		Maize Chlorit Maize Dwarf	ic Mottle Virus Mosaic Virus vny Mildew of Corn	.Strain
			Anthracnose Diplodia Stalk Fusarium Sta Gibberella Sta Other (Specifi	Rot lk Rot alk Rot	TA ALL
Aspergillus Ear and Kernel Rot (Aspergillus flavus) Diplodia Ear Rot (Stenocarpella maydis) Fusarium Ear and Kernel Rot (Fusarium moniliforme) Gibberella Ear Rot (Gibberella zeae) Other (Specify)			Aspergillus Ea Diplodia Ear F Fusarium Ear Gibberella Ea Other (Specify	& Kernel Rot r Rot	
Application Variety Data			Standard Inbred D	ata	
lote: Use chart on first page to choose color codes for color traits					

Application Variety Data	Page 4		Standard Inbred Data
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most releave blank if not tested):	sistant); Standard Deviation	Sample Size	Standard Deviation Sample Size
Banks Grass Mite (Oligonychus pratensis)			Banks Grass Mite
Corn Earworm (<i>Helicoverpa zea</i>) Leaf-Feeding Silk Feeding: mg larval wt Ear Damage			Corn Earworm Leaf Feeding Ear Damage
Corn Leaf Aphid (Rhopalosiphum maidis) Corn Sap Beetle (Carpophilus dimidiatus)		:	Corn Leaf Aphid Corn Sap Beetle
European Corn Borer (Ostrinia nubilalis) 1st Generation (Typically Whorl Leaf Feeding) 2nd Generation (Typically Leaf Sheath-Collar Feeding) Stalk Tunneling: cm tunneled/plant		 ;	European Corn Borer 1st Generation 2nd Generation
Fall Armyworm (Spodoptera frugiperda) Leaf-Feeding Silk-Feeding: mg larval wt.		·	Fall Armyworm Leaf Feeding
Maize Weevil (Sitophilus zeamaize) Northern Rootworm (Diabrotica barberi) Southern Rootworm (Diabrotica undecimpunctata)			Maize Weevil Northern Rootworm Southern Rootworm
Southwestern Corn Borer (<i>Diatraea grandiosella</i>) Leaf Feeding Stalk Tunneling:cm tunneled/plant			Southwestern Corn Borer Leaf Feeding
Two-spotted Spider Mite (<i>Tetranychus urticae</i>) Western Rootworm (<i>Diabrotica virgifera virgifera</i>) Other (Specify)			Two-spotted Spider Mite Western Rootworm Other (Specify)
12. AGRONOMIC TRAITS:			- 420
6 Stay Green (at 65 days after anthesis) (Rate on a scale from	1=worst to 9=excellent.)		1 Stay Green
0 0 . 0 % Dropped Ears (at 65 days after anthesis)			0 0 . 1 % Dropped ears
0 0 .0 % Pre-anthesis Brittle Snapping			0.0.0 % Pre-anthesis Brittle Snapping
0 0. 0 % Pre-anthesis Root Lodging			0 0 . 0 % Pre-anthesis Root Lodging
0 0. 0 % Post-anthesis Root Lodging (at 65 days after anthesis)			0 0 . 0 % Post-anthesis Root Lodging
Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)			Yield
13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but n	not supplied; 2=data supplied)	
0 Isozymes 0 RFLP's 0 RAPD's	Other (Specify)		
REFERENCES:			
Butler, D.R. 1954. A System for the Classification of Corn Inbred Lines. P Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Links Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plan Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publishi Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Use McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp. Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburgh The Mutants of Maize. 1988. Crop Science Society of America. Madison, Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Pau Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improven Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959. U.S. Department of Agriculture. 1936, 1937. Yearbook.	age Studies in Maize. Cornel t and Plant Products in the L ng Company, Westport, CT. s. John Wiley & Sons, New \ I, N.Y. 12551-0230 WI. II. MN. 105 pp.	I A.É.S., Mem. 180. Inited States. The A York.	nmerican Phytopathological Society, St. Paul, MN.
COMMENTS (e.g. state how heat units were calculated, standard inbred s	eed source, and/or where da	ta was collected. C	continue in Exhibit D):
Heat Unit Calculation: GDU = <u>Daily Max Temp (<=8</u>	_		
Supplemental data provided for pollen shed, ear weight, % round inventory data. Supplemental data for quantitative traits for subjections.	kernels and weight per 1 ct variety 'LH299' obtain	00 kernels from ed from 2006 and	2006 production parent test data and 2006 seed f 2007 seed inventory and production parent test.

is to be issued (7 U.S.C. 2421 af until the certificate is issued RARY DESIGNATION 3 PERIMENTAL NUMBER	VARIETY NAME LH299 FAX (Include area toda) (815) 758-3117 2005 000 2 X YES NO
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original owner(s) a U.S. based	company?
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e e	eet the following criteria: be a U.S. national, national of a the same genus and species. hal breeder(s), the company must affords similar protection to nater and the applicant must meet of

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT F

NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION
Holden's Foundation Seeds LLC	8350 Minnegan Road, Waterman, IL 60556 USA	TEM OF THE DESIGNATION
		VARIETY NAME LH299
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR DEFICIAL USE ONLY
Timothy R. Kain	8350 Minnegan Road, Waterman, IL 60556 USA	PVPO NUMBER
		200600028

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Signature/

3/17/2008